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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,669

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Erik Hilfrich

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BOSTON, MA 02110

EXAMINER

ZIMMERMAN, JOHN J

ART UNIT

PAPER NUMBER

1784

MAIL DATE

DELIVERY MODE

09/28/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,669	Applicant(s) HILFRICH, ERIK	
	Examiner John J. Zimmerman	Art Unit 1784	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/16/2009 (Prelim. Amdt.).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060410</u> . | 6) <input type="checkbox"/> Other: _____ |

FIRST OFFICE ACTION

Preliminary Amendments

1. This First Office Action considers the specification and claims as amended by the correspondence titled "PRELIMINARY AMENDMENT" received March 16, 2009. Claims 1-3 and 5-6 are pending in this application.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement received April 10, 2006 has been considered. The references "XP 000600330" and "XP 000725079" appear to be incorrectly listed as "Foreign Patent Documents" (they appear to be non-patent literature). Applicant may wish to resubmit these documents on a form PTO-1449 as non-patent literature so that their correct non-patent literature information will appear on the "References Cited" section on the front of any patent that may result from this application.

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Specification

4. The replacement abstract submitted with the correspondence titled "PRELIMINARY AMENDMENT" received March 16, 2009 is objected to since the abstract does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Drawings

5. There are no objections to the drawing filed in this application on March 31, 2008.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hillmann (U.S. Patent 6,048,628) in view of Takemoto (JP 2000-158165).

2. The pending claims essentially recite a method of production wherein a continuous process is used to produce a sheet metal strip having differing thickness and/or quality running parallel to the longitudinal direction of the sheet strip and wherein individual sheet metal sections with straight edges are cut from said sheet strip and transversely joined to a second sheet metal

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section in such a way that it creates local reinforcement zones. Hillmann has been applied in this rejection to show the level of ordinary skill in the art in the design of automobile tailored blanks. Hillmann states that it "is conventional practice to design a plate-structure part intended for a part-shaping operation with a thickness which varies in zones according to the mechanical loads to which the zones of the resulting part will be subjected. It is also known to adapt local zones of such a plate-structure part, e.g. for hinge and shock-absorber receptacles, for attachment regions for doors and flaps and for attachment regions for beams or other load-bearing elements, with a thickness which varies in accordance with predeterminable load condition occurring during the use of the formed part in order to avoid unnecessary material input and to achieve a reduction in weight. Such varying thickness plate design also permits a reduction in the initial thickness of such a plate-structure part by using a thinner base plate. Larger plate thicknesses are accompanied by greater plate strength, in particular torsional rigidity, bending strength and also greater compressive and tensile strength. In conventional tailored blanks, plate strips of different thickness are joined together for this purpose, for example a thinner plate strip may be arranged between thicker plate strips, in order to be subsequently formed together into a shaped part. There are limitations on the use of these tailored blanks with respect to the adaptation of the material thickness to the respective load profile of the formed part used in the vehicle, i.e. the formed part is also still reinforced in zones in which it does not need to be reinforced. There are, therefore, corresponding limits placed on the reduction in weight when using tailored blanks" (e.g. see column 1, lines 10-38). Therefore, it is clear from Hillmann's disclosure of the state of the art, that tailored blanks having thicker regions can be joined to thinner plate strips so as to form composite blanks that are adapted to the respective load profile that would be beneficial to

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particular parts used in vehicles. It would be understood by one of ordinary skill in the art that butt joints would result from arranging a thinner plate strip between thicker plate strips and joining to form varying thickness blanks. Hillmann's disclosure of the prior art may differ from the pending claims in that Hillman may not require one of the joined sheets of the tailored blank to be made in a continuous process wherein a sheet metal strip having a differing thickness and/or quality running parallel to the longitudinal direction of the sheet strip is formed and then further cut into individual sheet metal sections from the sheet metal strip. Takemoto '165, however, shows that it is well known in the automotive tailored blank art that continuously welding steel strips having differing thicknesses and/or properties and then cutting parts to size from the resultant welded strips leads to higher productivity (e.g. see paragraphs [0001], [0005]-[0007]). Specifically Takemoto '165 discloses using this continuous method results in productivity improving by "leaps and bounds" compared to first cutting the steel strips to size followed by welding operations (e.g. see [0022]-[0023]). Therefore, in order to improve productivity, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Takemoto's continuous longitudinal welding method to make any portions of a Hillmann's tailored blanks that can be made by Takemoto's continuous method. While Hillmann does not disclose that such portions of the tailored blank must be "transversely" joined to a second sheet metal section in such a way that it creates local reinforcement zones, the location and orientation of the joined region of the composite blanks would be a mere matter of design choice for a particular tailored blank depending on the article to be produced. If a particular article would benefit from orienting a tailored blank part "transversely" to another part of the tailored blank, then such orientation would be obvious for that article. It must be assumed

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that one of ordinary skill in the metal fabrication art understands how to determine what sections of a composite blank would benefit from reinforcement and how to orient and join sections of a composite tailored blank to meet the structural requirements of a particular article. Therefore, regarding claim limitations to the orientation or the sheets, number or reinforced regions and location of the joints between individual portions, it would have been obvious to one of ordinary skill in the art at the time the invention was made to configure and orient the parts of the tailored blanks of Hillmann's prior art to meet the configuration and structural requirements of any automotive component that would benefit from reinforcement. While various different configurations and joint/sheet orientations may be recited in the pending claims, there is no showing that any of these configurations and joint/sheet orientations would be patentable distinctions over Hillmann's prior art blanks in view of Takemoto '165. The configuring and/or reinforcement of blanks to match the needs of particular end uses is conventional in the manufacturing art and would be a matter of engineering design choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configurations are significant. No convincing evidence shows that the claimed configurations are anything more than ones of numerous patentably indistinct configurations a person of ordinary skill in the art would find obvious for this purpose. See *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). All the claimed elements were known in the prior art and one of ordinary skill in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in art at the time of the invention. See *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (2007).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional prior art made of record serves to further establish the level of ordinary skill in the art.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Zimmerman whose telephone number is (571) 272-1547. The examiner can normally be reached on 8:30am-5:00pm, M-F. Supervisor Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John J. Zimmerman
Primary Examiner
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/John J. Zimmerman/

Primary Examiner, Art Unit 1784

jjz

September 26, 2010